RECEIVED
CENTRAL FAX CENTER
JAN 18 2008

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) An electrostatic actuator comprising:

a substrate;

an electrode formed on said substrate;

a plurality of partition parts formed on said electrode;

a vibration plate formed on said partition parts, said vibration plate being deformable by an electrostatic force generated by a voltage applied to said electrode; and

an air gap formed between said plurality of partition parts by etching a part of a sacrifice layer formed between said electrode and said vibration plate, wherein said partition parts comprise remaining parts of said sacrifice layer after said etching,

wherein said sacrifice layer is formed of a conductive material, and said remaining parts of said sacrifice layer are electrically connected to one of said substrate, a dummy electrode and said vibration plate so that said remaining parts are at the same potential with said one of said substrate, said dummy electrode and said vibration plate.

2. (original) The electrostatic actuator as claimed in claim 1, wherein said substrate is a silicon substrate.

3. (original) The electrostatic actuator as claimed in claim 1, further comprising dummy electrodes at positions corresponding to said partition parts, said dummy electrodes being

electrically separated from said electrode by separation grooves.

4. (original) The electrostatic actuator as claimed in claim 1, wherein said sacrifice layer is formed of a material selected from a group consisting of polysilicon, amorphous silicon, silicon oxide, aluminum, titanium nitride and polymer.

5. (original) The electrostatic actuator as claimed in claim 1, wherein said electrode is formed of a material selected from a group consisting of polysilicon, aluminum, titanium, titanium nitride, titanium silicide, tungsten, tungsten silicide, molybdenum, molybdenum silicide and ITO.

6. (original) The electrostatic actuator as claimed in claim 3, wherein an insulating layer is formed on said electrode, and said separation grooves are filled with the insulating layer.

7. (original) The electrostatic actuator as claimed in claim 6, wherein a thickness of said insulating layer is equal to or greater than one half of a width of each of said separation grooves.

8. (original) The electrostatic actuator as claimed in claim 1, wherein said sacrifice layer is divided by separation grooves, and an insulating layer is formed on said sacrifice layer so that said separation grooves are filled with said insulating layer.

9. (original) The electrostatic actuator as claimed in claim 8, wherein a thickness of said insulating layer is equal to or greater than one half of a width of each of said separation grooves.

Claim 10 (canceled).

11. (original) The electrostatic actuator as claimed in claim 3, wherein said sacrifice layer is formed of a conductive material, and at least one of said remaining parts of said sacrifice layer and said dummy electrodes serve as a part of electric wiring.

12. (original) The electrostatic actuator as claimed in claim 1, further comprising insulating layers on said electrode and a surface of said vibration plate facing said electrode, wherein said sacrificing layer is formed of one of polysilicon and amorphous silicon, and said insulating layers are formed of silicon oxide.

13. (original) The electrostatic actuator as claimed in claim 1, wherein said sacrificing layer is formed of silicon oxide and said electrode is formed of polysilicon.

14. (original) The electrostatic actuator as claimed in claim 1, wherein a through hole is formed in said vibration plate for removing by etching the parts of said sacrifice layer through said through hole so as to form said air gap.

15. (original) The electrostatic actuator as claimed in claim 14, wherein said through hole is located near said partition parts.

16. (original) The electrostatic actuator as claimed in claim 1, wherein said vibration

plate has substantially a rectangular shape, and a shorter side of said vibration plate is equal to or less than 150 .mu.m.

17. (original) The electrostatic actuator as claimed in claim 1, wherein a distance of said air gap measured in a direction perpendicular to a surface of said electrode facing said vibration plate is substantially 0.2 .mu.m to 2.0 .mu.m.

18. (original) The electrostatic actuator as claimed in claim 14, wherein a plurality of said through holes are arranged along a longer side of said vibration plate at an interval equal to or less than a length of the shorter side of said vibration plate.

19. (currently amended) [[The]] An electrostatic actuator ~~as claimed in claim 1, further~~ comprising:

a substrate;

an electrode formed on said substrate;

a plurality of partition parts formed on said electrode;

a vibration plate formed on said partition parts, said vibration plate being deformable by an electrostatic force generated by a voltage applied to said electrode;

an air gap formed between said plurality of partition parts by etching a part of a sacrifice layer formed between said electrode and said vibration plate, wherein said partition parts comprise remaining parts of said sacrifice layer after said etching; and

a through hole formed in said vibration plate for removing the parts of said sacrifice layer through said through hole so as to form said air gap; and a resin film formed on a surface

opposite to a surface facing said electrode, wherein said through hole is sealed by said resin film of said member.

20. (original) The electrostatic actuator as claimed in claim 19, wherein a cross-sectional area of said through hole is substantially equal to or greater than 0.19 .mu.m.sup.2 and equal to or less than 10 .mu.m.sup.2.

21. (original) The electrostatic actuator as claimed in claim 19, wherein a thickness of an insulating layer in a periphery of an opening of said through hole is substantially equal to or greater than 0.1 .mu.m.

22. (original) The electrostatic actuator as claimed in claim 19, wherein said resin film has a corrosion resistance with respect to a substance to be brought into contact with said vibration plate.

23. (original) The electrostatic actuator as claimed in claim 19, wherein said resin film is formed of one of a polybenzaoxazole film and a polyimide film.

24. (original) The electrostatic actuator as claimed in claim 14, further comprising a member joined to an upper surface of said vibration plate, wherein said through hole is sealed by a joining surface of said member.

25. (original) The electrostatic actuator as claimed in claim 1, further comprising an

insulating layer formed on a surface of said vibration plate facing said electrode, wherein a thickness of said insulating layer near a center between said partition parts adjacent to each other is larger than a thickness of said insulating layer near said partition parts.

26. (original) The electrostatic actuator as claimed in claim 1, further comprising an insulating layer formed on said electrode, wherein a thickness of said insulating layer near a center between said partition parts adjacent to each other is larger than a thickness of said insulating layer near said partition parts.

27. (currently amended) [[The]] An electrostatic actuator ~~as claimed in claim 1~~ comprising:

a substrate;

an electrode formed on said substrate;

a plurality of partition parts formed on said electrode;

a vibration plate formed on said partition parts, said vibration plate being deformable by an electrostatic force generated by a voltage applied to said electrode; and

an air gap formed between said plurality of partition parts by etching a part of a sacrifice layer formed between said electrode and said vibration plate, wherein said partition parts comprise remaining parts of said sacrifice layer after said etching,

wherein a cavity is formed between said electrode and said substrate, and said electrode has a connection through hole connecting said cavity to said air gap.

28. (original) The electrostatic actuator as claimed in claim 27, further comprising

insulating layers on both sides of said electrode, wherein a total thickness of said electrode and said insulating layers exceeds a thickness of said vibration plate.

Claims 29-49 (canceled).